



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

MICHAEL SHU-HUAN WANG ET AL.

Serial No. 10/718,921 (TI-34402)

Filed November 21, 2003

For: CHEMICAL MECHANICAL POLISHING APPARATUS AND METHOD TO  
MINIMIZE SLURRY ACCUMULATION AND SCRATCH EXCURSIONS

Art Unit 3723

Examiner Shantese L. McDonald

Customer No. 23494

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

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4-14-08

Jay M. Cantor, Reg. No. 19.906

Sir:

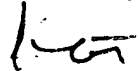
**REPLY BRIEF**

In reply to the Examiner's Answer, it is again noted that a principal feature of the present invention as defined in claim 12 is the recognition that the center or axial portion of the cleaning pad was not being adequately cleaned between processing cycles (from wafer to wafer), resulting in the problems listed in the specification at page 7, line 15ff. This problem is nowhere taught or even remotely suggested by Chang, Tolles or any proper combination of these references and is set forth in claim 12 by the language "dispensing a wash material directly to the most center portion of said polishing surface about and including said axis".

The examiner alleges that "Cheng et al. teaches a method for imparting relative motion to a polishing pad wherein the polishing pad is rotated about a center axis which is perpendicular to the polishing surface of the polishing pad, and dispensing a material to the most center portion of the polishing surface and including the axis, and further dispensing the material from the dispensing arm to the polishing pad all along an area from the circumference of the polishing pad to the axis (col. 7, lines 14-45)" A review of the cited portion of Cheng et al. and the accompanying drawings demonstrates the contrary. Note in Fig. 4 of Cheng et al. that the slurry dispensing takes place from dispensing nozzle 78. This nozzle, though not shown in Figs. 5A-5C, is located in Figs. 5A-5C on the arm 74 and beneath the shaft 92 as seen from Fig. 4. As can be seen from Figs. 5A-5C, the nozzle 78 is never at the most center portion of the polishing surface which is the fixed center axis 88 (col 6, line 48). Rather, the nozzle 78 moves around the polishing surface in an arc always displaced from the axis 88 as demonstrated in Figs. 5A-5C. It follows that Cheng et al. fails to teach or even remotely suggest the problem involved or its solution as claimed. Tolles has no bearing on this issue.

For the reasons stated above and in the Brief on Appeal, reversal of the final rejection and allowance of the claims on appeal is requested that justice be done in the premises.

Respectfully submitted,



Jay M. Cantor  
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TI-34402-1

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